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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Complete if Known			
				Application Number		09/983,020	
				Filing Date		October 22, 2001	
				First Named Inventor		Steven W. HOMAN	
				Group Art Unit		1645	
Examiner Name				To be assigned			
Sheet	1	of	4	Attorney Docket Number	1496-205		
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## **U.S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

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## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
MWY	5	Ramirez et al., "Modulation of the Alignment Tensor of Macromolecules Dissolved in a Dilute Liquid Crystalline Medium," <u>J. Am. Chem. Soc.</u> 120:9106-9107, 1998.	
/	6	Tjandra, et al., "Magnetic Field Dependence of Nitrogen-Proton J Splittings in <sup>15</sup> N-Enriched Human Ubiquitin Resulting from Relaxation...," <u>J. Am. Chem. Soc.</u> , 118:6264-6272, 1996.	
/	7	Bax et al., "High-Resolution Heteronuclear NMR of Human Ubiquitin in an Aqueous Liquid Crystalline Medium," <u>J. Biomol. NMR</u> , 10:289-292, 1997.	
/	8	Losonczi et al., "Improved Dilute Bicelle Solutions for High-Resolution NMR of Biological Macromolecules," <u>J. Biomol. NMR</u> , 12:447-451 1998.	
/	9	Prosser et al., "Use of a Novel Aqueous Liquid Crystalline Medium for High-Resolution NMR of Macromolecules in Solution," <u>J. Am. Chem. Soc.</u> 120:11010-11011, 1998.	
/	10	Clore et al., "Measurement of Residual Dipolar Couplings of Macromolecules Aligned in the Nematic Phase of a Colloidal...," <u>J. Am. Chem. Soc.</u> 120:10571-10572, 1998.	
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/	12	Kiddle et al., "Residual Dipolar Couplings as New Conformational Restraints in Isotopically <sup>13</sup> C-Enriched Oligosaccharides," <u>FEBS Letters</u> 436:128-130, 1998.	
/	13	Wang et al., "A Liquid Crystalline Medium for Measuring Residual Dipolar Couplings Over a Wide Range of Temperatures," <u>J. Biomol. NMR</u> , 12:443-446, 1998.	
/	14	Ottiger et al., "Bicelle-Based Liquid Crystals for NMR-Measurement of Dipolar Couplings at Acidic and Basic pH Values," <u>J. Biomol. NMR</u> , 13:187-191, 1999.	
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/	16	Rückert et al., "Alignment of Biological Macromolecules in Novel Nonionic Liquid Crystalline Media for NMR Experiments," <u>J. Am. Chem. Soc.</u> 122:7793-7797, 2000.	
/	17	Mueller et al., "A Method for Incorporating Dipolar Couplings Into Structure Calculations in Cases of (Near) Axial Symmetry of Alignment," <u>J. Biomol. NMR</u> 18:183-188, 2000.	
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MWY	19	Tjandra et al., "Use of Dipolar <sup>1</sup> H- <sup>15</sup> N and <sup>1</sup> H- <sup>13</sup> C Couplings in the Structure Determination of Magnetically Oriented Macromolecules in Solution," <u>Nature Struct. Biol.</u> 4(9):732-738, 1997.	

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Myb	20	Wang et al., "Simultaneous Measurement <sup>1</sup> H- <sup>15</sup> N, <sup>1</sup> H- <sup>13</sup> C' and <sup>15</sup> N- <sup>13</sup> C' Dipolar Couplings in a Perdeuterated 30 kDa Protein Dissolved in a Dilute Liquid Crystalline Phase," <u>J. Am. Chem. Soc.</u> , 120:7385-7386, 1998.	
,	21	Ottiger et al., "Measurement of J and Dipolar Couplings from Simplified Two-Dimensional NMR Spectra," <u>J. Magn. Reson.</u> , 131:373-378, 1998.	
,	22	Lerche et al., "Pulse Sequences for Measurement of One-Bond <sup>15</sup> N- <sup>1</sup> H Coupling Constants in the Protein Backbone," <u>J. Magn. Reson.</u> , 140:259-263, 1999.	
,	23	Tjandra et al., "Measurement of Dipolar Contributions to <sup>1</sup> JCH Splittings from Magnetic-Field Dependence of J Modulation in Two-Dimensional NMR Spectra," <u>J. Magn. Reson.</u> , 124:512-515, 1997.	
,	24	Clore et al., "Direct Structure Refinement Against Residual Dipolar Couplings in the Presence of Rhombicity of Unknown Magnitude," <u>J. Magn. Reson.</u> , 131:159-162, 1998.	
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,	27	Beger et al., "Protein $\phi$ and $\psi$ Dihedral Restraints Determined from Multidimensional Hypersurface Correlations of Backbone Chemical Shifts and their Use in the Determination of Protein Tertiary Structures," <u>J. Biomol. NMR</u> , 10:129-142, 1997.	
,	28	Ottiger et al., "Determination of Relative N-H <sup>N</sup> , N-C', C <sup><math>\alpha</math></sup> -C', and C <sup><math>\alpha</math></sup> -H <sup><math>\alpha</math></sup> Effective Bond Lengths in a Protein by NMR in a Dilute Liquid Crystalline Phase," <u>J. Am. Chem. Soc.</u> , 120:12334-12341, 1998..	
,	29	Ikura et al., "A Novel Approach for Sequential Assignment of <sup>1</sup> H, <sup>13</sup> C, and <sup>15</sup> N Spectra of Larger Proteins: Heteronuclear Triple-Resonance Three-Dimensional NMR Spectroscopy," <u>Biochemistry</u> 29:4659-4667, 1990.	
,	30	Brünger, X-PLOR version 3.1: "A system for X-Ray Crystallography and NMR", Yale University Press, New Haven, CT., v-xv, 1987.	
,	31	Losonczi et al., "Order Matrix Analysis of Residual Dipolar Couplings Using Singular Value Decomposition," <u>J. Magn. Reson.</u> , 138:334-342, 1999.	
Myb	32	Tolman et al., "Nuclear Magnetic Dipole Interactions in Field-Oriented Proteins: Information for Structure Determination in Solution", <u>Proc. Natl. Acad. Sci. USA</u> 92:9279-9283, 1995.	

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MM	33	Tjandrea et al., "Direct Measurement of Distances and Angles in Biomolecules by NMR in a Dilute Liquid Crystalline Medium," <u>Science</u> 278:1111-1113, 1997.
	34	Fowler et al., "Rapid Determination of Protein Folds Using Residual Dipolar Couplings," <u>J. Mol. Biol.</u> 304:447-460, 2000.
	35	Hus et al., "Determination of Protein Backbone Structure Using Only Residual Dipolar Couplings," <u>J. Am. Chem. Soc.</u> 123:1541-1542, 2001.
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MM	37	Mueller et al., "Global Folds of Proteins with Low Densities of NOEs Using Residual Dipolar Couplings: Application to the 370-Residue Maltodextrin-Binding Protein," <u>J. Mol. Biol.</u> 300:197-212, 2000.

Examiner Signature

*W. Homans*

Date Considered

*05/2003*

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